

Multiplying Polynomials

Remember Exponent Properties (Monomials)

1.) $x^1(2x^2)$

$$\begin{array}{r} 2x^1x^2 \\ \hline 2x^3 \end{array}$$

2.) $3x^4(5x^3)$

$$\begin{array}{r} 3 \cdot 5 \cdot x^4 \cdot x^3 \\ \hline 15x^7 \end{array}$$

Remember the Distributive Property

3.) $3(x^2 + 3)$

$$\begin{array}{r} 3(x^2 + 3) \\ \hline 3x^2 + 9 \end{array}$$

4.) $x^3(x^2 + 3x + 5)$

$$\begin{array}{r} x^3(x^2 + 3x + 5) \\ \hline x^5 + 3x^4 + 5x^3 \end{array}$$

Dividing Polynomials

Remember Exponent Properties (Monomials)

5.) $\frac{18x^2}{3x}$

$$6x$$

6.) $\frac{25x^2 + 15x}{5}$

$$5x^2 + 3x$$

Remember the Distributive Property

7.) $\frac{14x^2 + 21x + 28}{-7}$

$$-2x^2 - 3x - 4$$

8.) $\frac{16x^8 + 2x}{2x}$

$$\frac{16x^8}{2x} + \frac{2x}{2x}$$
$$8x^7 + 1$$